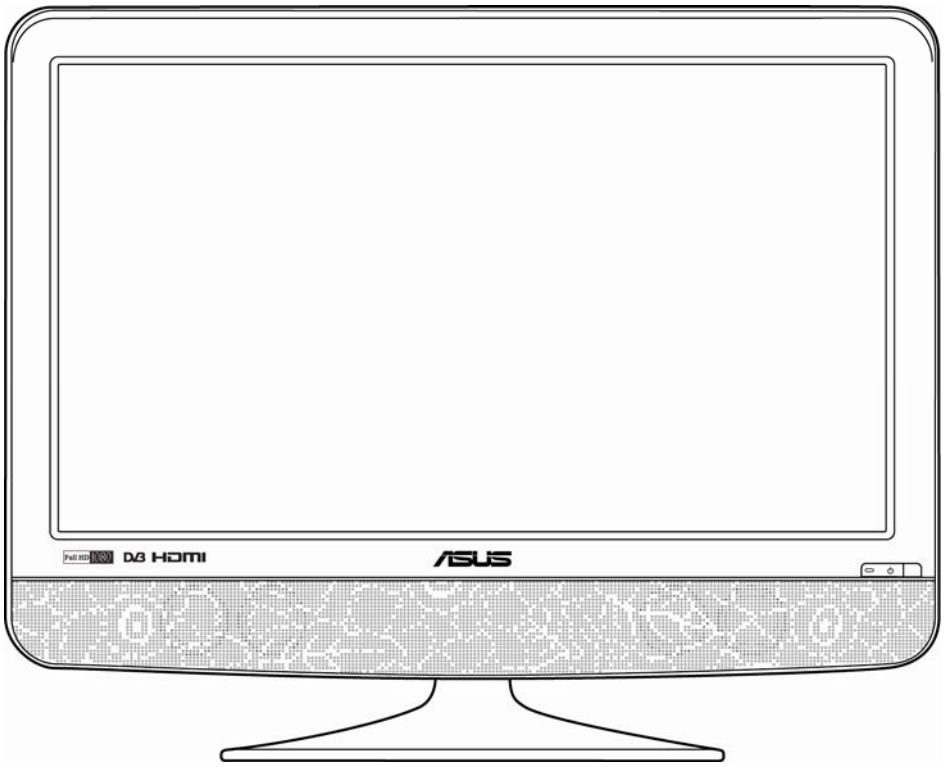
LED TV Monitor

T1 Series

User's Manual



E4532

Third Edition
August 2010

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Notices

Federal Communications Commission Statement

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- This device may not cause harmful interference, and
- This device must accept any interference received including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with manufacturer' s instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

The use of shielding cables for connection of the display to the graphics card is required to assure compliance with FCC regulations. Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

As an Energy Star® Partner, our company has determined that this product meets the Energy Star® guidelines for energy efficiency.

Canadian Department of Communications Statement

This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications.

This class B digital apparatus complies with Canadian ICES-003.

Safety Information

- Before setting up the display, carefully read all the documentation that came with the package.
- To prevent fire or shock hazard, never expose the display to rain or moisture.
- Never try to open the display cabinet. The dangerous high voltages inside the display may result in serious physical injury.
- If the power supply is broken, do not try to fix it by yourself. Contact a qualified service technician or your retailer.
- Before using the product, make sure all cables are correctly connected and the power cables are not damaged. If you detect any damage, contact your dealer immediately.
- Slots and openings on the back or top of the cabinet are provided for ventilation. Do not block these slots. Never place this product near or over a radiator or heat source unless proper ventilation is provided.
- The display should be operated only from the type of power source indicated on the label. If you are not sure of the type of power supply to your home, consult your dealer or local power company.
- Use the appropriate power plug which complies with your local power standard.
- Do not overload power strips and extension cords. Overloading can result in fire or electric shock.
- Avoid dust, humidity, and temperature extremes. Do not place the display in any area where it may become wet. Place the display on a stable surface.
- Unplug the unit during a lightning storm or if it will not be used for a long period of time. This will protect the display from damage due to power surges.
- Never push objects or spill liquid of any kind into the slots on the display cabinet.
- To ensure satisfactory operation, use the display only with UL listed computers which have appropriate configured receptacles marked between 100-240V AC.
- If you encounter technical problems with the display, contact a qualified service technician or your retailer.

This symbol of the crossed out wheeled bin indicates that the product (electrical, electronic equipment, and mercury-containing button cell battery) should not be placed in municipal waste. Please check regulations for disposal of electronic products.

To prevent the spread of fire, keep candles or other open flames away from this product at all times.

Care and Cleaning

- Before you lift or reposition your display, it is better to disconnect the cables and power cord. Follow the correct lifting techniques when positioning the display. When lifting or carrying the display, grasp the edges of the display. Do not lift the display by the stand or the cord.
- Cleaning. Turn your display off and unplug the power cord. Clean the display surface with a lint-free, non-abrasive cloth. Stubborn stains may be removed with a cloth dampened with mild cleaner.
- Avoid using a cleaner containing alcohol or acetone. Use a cleaner intended for use with the LED. Never spray cleaner directly on the screen, as it may drip inside the display and cause an electric shock.

The following symptoms are normal with the display:

- The screen may flicker during the initial use due to the nature of the fluorescent light. Turn off the Power Switch and turn it on again to make sure that the flicker disappears.
- You may find slightly uneven brightness on the screen depending on the desktop pattern you use.
- When the same image is displayed for hours, an afterimage of the previous screen may remain after switching the image. The screen will recover slowly or you can turn off the Power Switch for hours.
- When the screen becomes black or flashes, or cannot work anymore, contact your dealer or service centre to fix it. Do not repair the screen by yourself!

Conventions used in this guide

WARNING: Information to prevent injury to yourself when trying to complete a task.

CAUTION: Information to prevent damage to the components when trying to complete a task.

IMPORTANT: Information that you MUST follow to complete a task.

NOTE: Tips and additional information to aid in completing a task.

Where to find more information

Refer to the following sources for additional information and for product and software updates.

1. **ASUS websites**

   The ASUS websites worldwide provide updated information on ASUS hardware and software products. Refer to http://www.asus.com

2. **Optional documentation**

   Your product package may include optional documentation that may have been added by your dealer. These documents are not part of the standard package.

Recycling Place

EUROPE

When disposing of ASUS products in Europe, please contact one of the following locations to make arrangements for recycling.

- **ASUS France S.A.R.L.**
  10 allee bienvenue, 93160, noisy le grand, France
  Tel: +33 1 49 32 96 50
- **ASUS COMPUTER GmbH (Germany)**
  Harkortstr. 21 – 23, 40880 Ratingen, Deutschland
  Hotline: +49 01805 / 010920 (Mo – Fr / 9 – 17h)
  Fax:+49 2102 9599-11 (24h)
- **ASUSTeK Italy srl**
  Via Piero Gobetti 2/B Centro direzionale Villa Fiorita 20063 Cernusco sul Naviglio (MI), Italy
  Tel: +39 199400089
  Fax: +39 02 20240555
- **ASUSTek UK Ltd.**
  1st Floor, Focus 31, West Wing, Mark Road, Hemel Hempstead, HP2 7BW, UK
  Tel: +44 1442 202 700
  Fax: +44 1442 245 882
- **ASUS IBERICA S.L.**
  C/ Plomo 5-7, 08038 Barcelona, Spain
  Tel: +34 902 889688
- **ASUS Nordic AB**
  Finlandsgatan 16, 4 Tr., 16474 Kista, Sweden
  Tel: +46 8 5889 8900
  Fax: +46 8 5889 8999
- **ASUS Computer Benelux B.V.**
  Fultonbaan 12 3439 NE Nieuwegein The Netherlands
  Tel: +31.30.60.22.452
  Hotline: +31 (0)591-668190
  Fax: +31 (0)591-666853
- **ASUS Computer Czech Republic S.R.O.**
  V Olsinach 2300/75, 10000 Prague, Czech Republic
  Tel: +420 274 774 872
  Fax: +420 274 774 889
- **ASUS Polska SP. Z.O.O.**
  Al. Jerozolimskie 200, 02-222 Warsaw 4 floor, Poland
  Tel: +48 22 571 80 00
  Fax: +48 22 571 80 01
- **ASUS Hungary Kft.**
  Tel: +36 1 505 45 61
  Fax: +36 1 505 45 63

NORTH AMERICA

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ASUS COMPUTER INTERNATIONAL (America)

- **US Headquarters:**
  800 Corporate Way, Fremont, CA 94539, USA
  Tel: +1 510-739-3777
  Fax: +1 510-608-4555
- **Canada Branch Office:**
  802 Cochrane Dr., Unit 2, Markham ON, L3R 8C9, Canada
  Tel: (905) 370-2787
  Fax: (905) 489-2718

ASIA PACIFIC

When disposing of ASUS products in Asia Pacific, please contact the following location to make arrangements for recycling.

- **ASUSTeK COMPUTER INC.**
  No. 15, Li-Te Rd., Peitou, Taipei, Taiwan
  Tel: +886-2-2894-3447
  Hotline: +886-(0)800-093-456
  Fax: +886-2-2895-9254

"THIS DISPLAY UNIT IS AN ELECTRIC DEVICE WHICH MAY CONTAIN HAZARDOUS MATERIALS AND COMPONENTS, AND WHICH MUST BE DISPOSED OF AT END OF LIFE ACCORDING TO THE PROPER PROCEDURE"

1.1 Welcome!

Thank you for purchasing the ASUS® TV Monitor T1 Series LED display!

The latest LED display from ASUS provides a host of features that enhance your viewing experience. It integrates a number of various media input interfaces and a built-in TV tuner to meet your needs on a display for working as well as entertainment.

With these features, you can enjoy the convenience and delightful visual experience that the TV Monitor T1 Series is to bring to you!

1.2 Package Contents

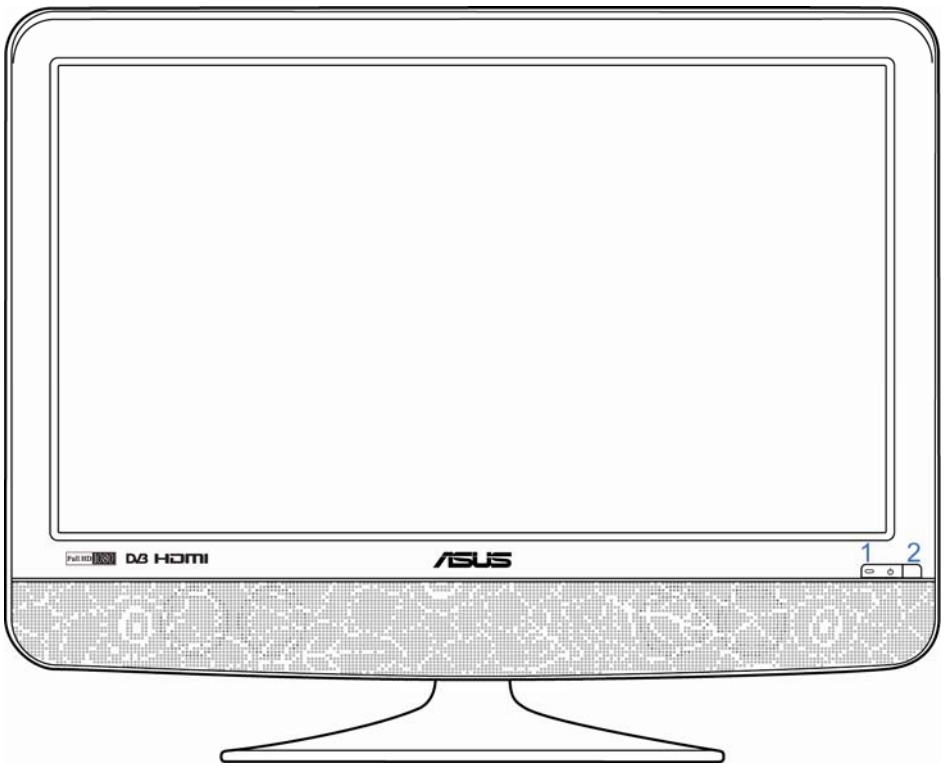
Check the package of your TV Monitor T1 LED display for the following items:

- LED display
- Display base and screw
- Warranty card
- Quick start guide
- User's manual CD
- Power cord
- VGA cable
- Remote controller and batteries
- Audio cable

If any of the above items is damaged or missing, contact your retailer immediately.

1.3 Display Introduction

1.3.1 Front view



1. **Power button and power indicator**

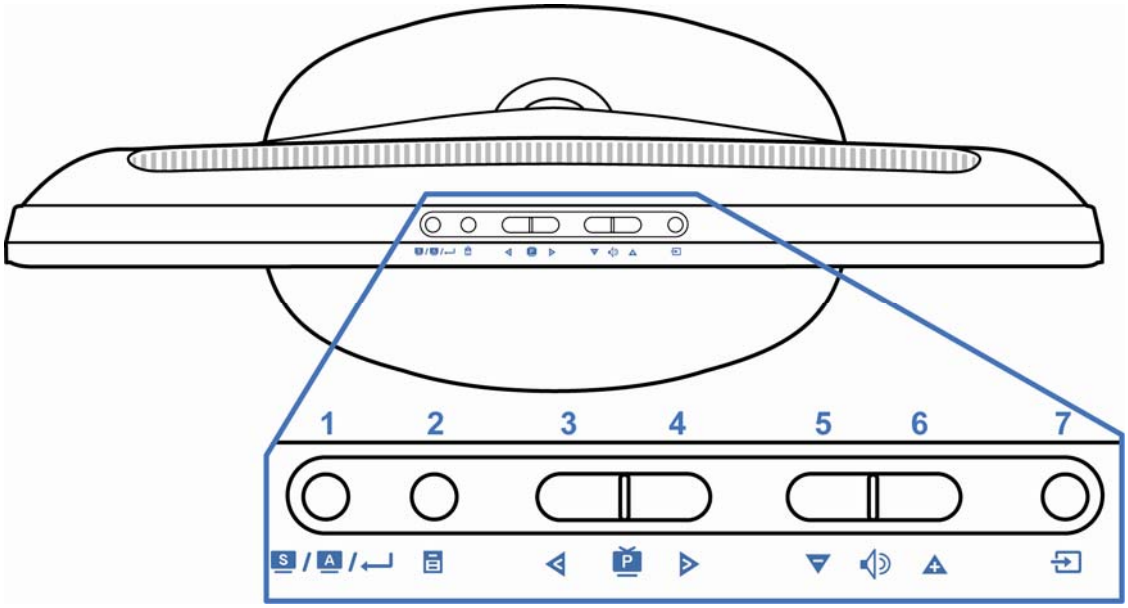
- Press this button to turn the display on, off, or stand-by.
- The colour of the power indicator is as the below table.

Status	Description
Blue	On
Red	Stand-by

2. **Remote receiver**

- The display receives the signal from the remote controller here.

1.3.2 Top view



1. S / A / ⏎ Splendid / Auto Adjust / Enter button

- To switch among preset Standard, Theatre, Game, and Scenery video modes of Splendid™ Video Enhancement Technology
- To automatically adjust the image from VGA input to its optimized parameters by pressing this button for 2 – 3 seconds
- To enter/select the icon (function) highlighted while the OSD is activated

2. Menu / Return /Exit button

- To activate the OSD menu
- To return to the top menu list when the OSD is activated
- To exit from input source selection

3. ◀ Previous Programme / Left button

- To switch to the previous programme
- To choose the left item of the OSD menu
- To choose the previous mode in Splendid™ mode selection or the previous source in Input source selection

4. ▶ Next Programme / Right button

- To switch to the next programme
- To choose the right item of the OSD menu
- To choose the next mode in Splendid™ mode selection or the next source in Input source selection

5. ▼ Volume Down / Down button

- To decrease the sound volume
- To choose the lower item of the OSD menu
- To choose the next mode in Splendid™ mode selection or the next source in Input source selection

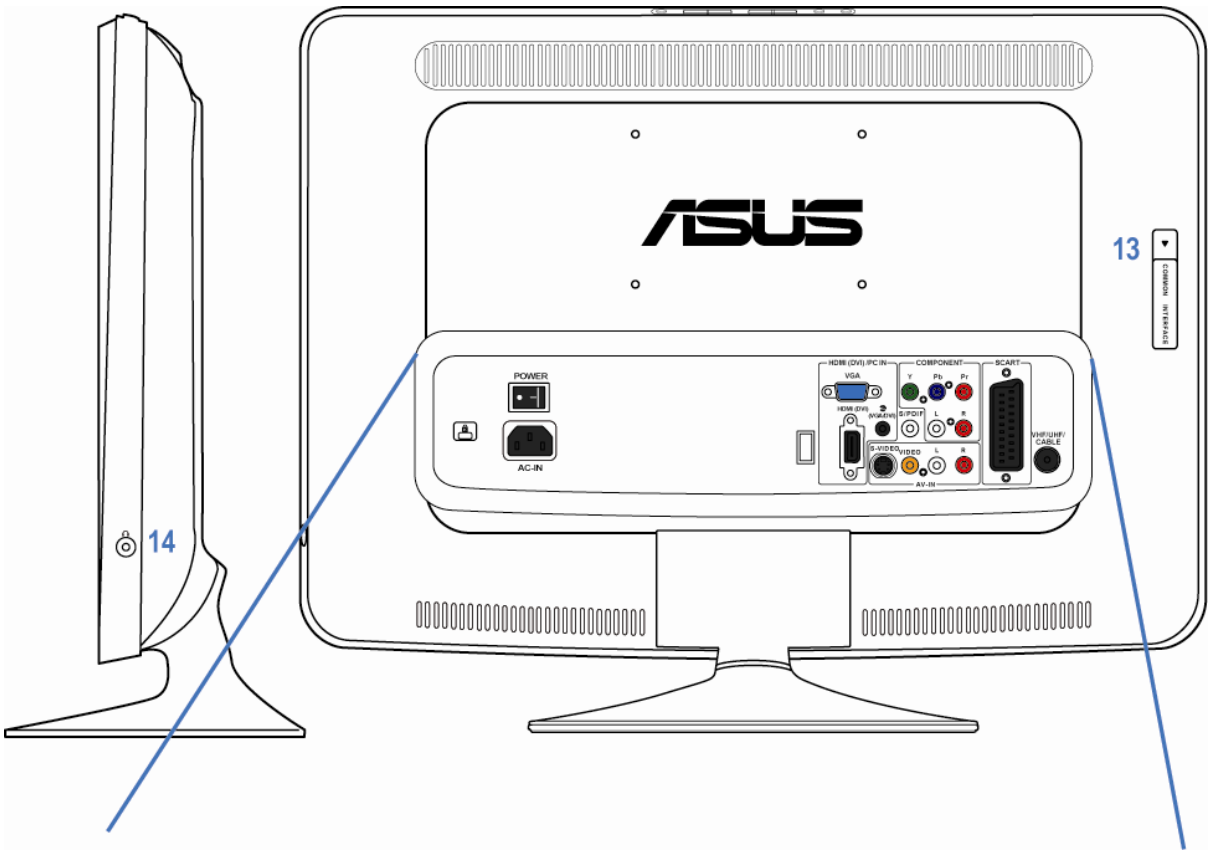
6. ▲ Volume Up / Up button

- To increase the sound volume
- To choose the upper item of the OSD menu
- To choose the previous mode in Splendid™ mode selection or the previous source in Input source selection

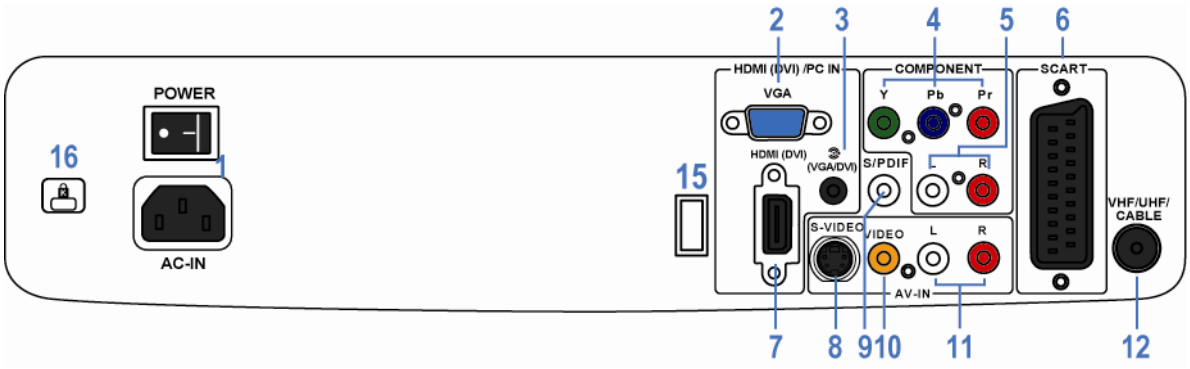
7. Source button

- To switch among the input signal sources of TV, SCART, Component, VGA, HDMI, Video, and S-Video
- To exit from OSD menu or from Splendid mode selection

1.3.3 Rear view



▼ 22T1EH, 24T1EH & 27T1EH

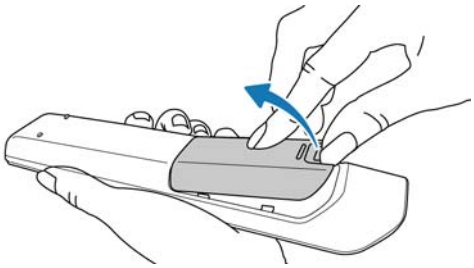


1. **Power socket and switch** to connect power cord and to switch the display on and off
2. **VGA connection for PC** VGA analogue signal connection
3. **Audio-in for PC stereo sound** to connect PC audio source
4. **Component connection** to connect Component (YPbPr) video signal source
5. **Audio-in connection** to input audio signal through RCA cable
6. **SCART connection** to connect AV devices
7. **HDMI connection** for High-Definition Multimedia Interface (HDMI) signal connection
8. **S-Video connection** to connect S-Video signal source
9. **Coaxial S/PDIF audio-out** to output digital audio signal over coaxial S/PDIF cable
10. **Video-in connection** to connect CVBS video signal source
11. **Audio-in connection** to input audio signal through RCA cable
12. **TV signal connection** to connect TV signal source from antenna or cable
13. **CI card slot** for CI (Common Interface) card from your CAM (Conditional Access Module, generally used for Pay per View services) provider
14. **Headphone jack** to output audio signal to headphone
15. **Service port** for manufacturer use ONLY
16. **Kensington Lock**

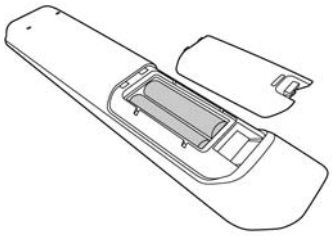
1.4 Remote Controller Introduction

Installing the batteries

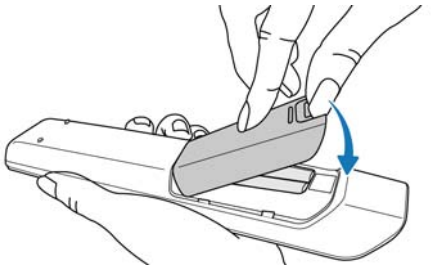
1. Open the battery compartment cover on the back side.



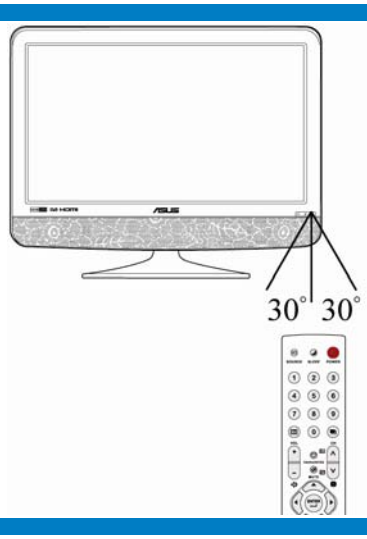
2. Insert two AAA type batteries in correct polarity (+ to +, - to -).



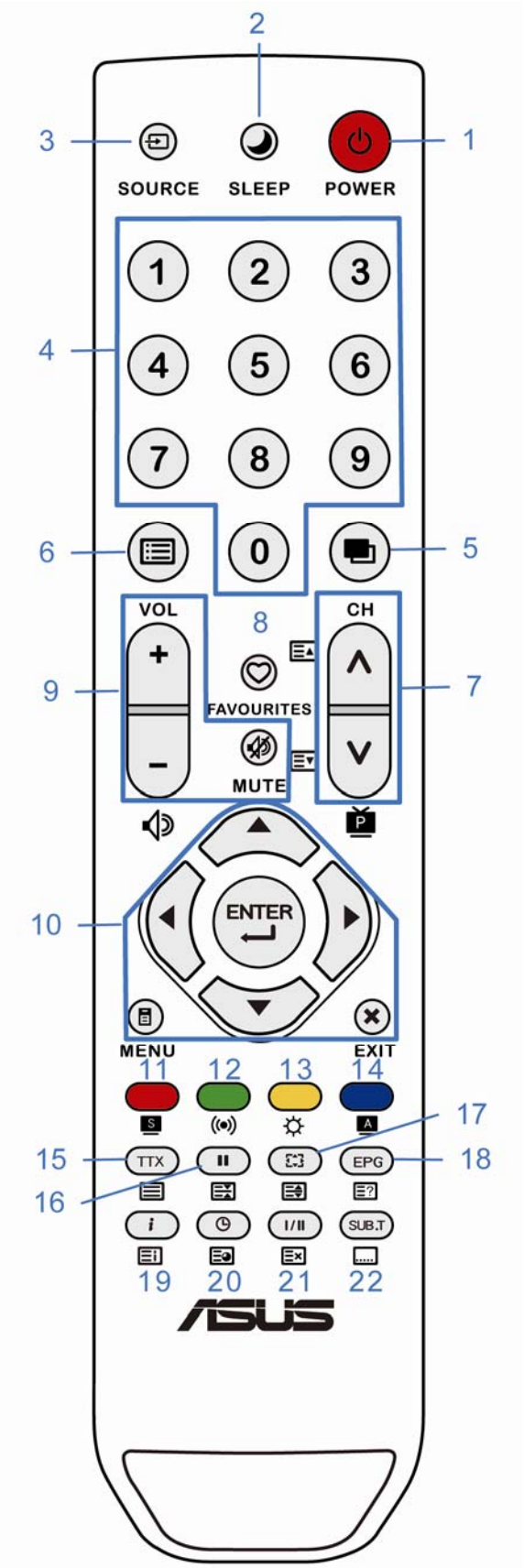
3. Close the cover.



DO NOT mix old or used batteries with new ones.



- Use the remote controller in front of the remote receiver with a distance shorter than 7 meters and within 30 degree to the left and to the right.
- Dispose of used batteries in a recycle bin to prevent from environment pollution.



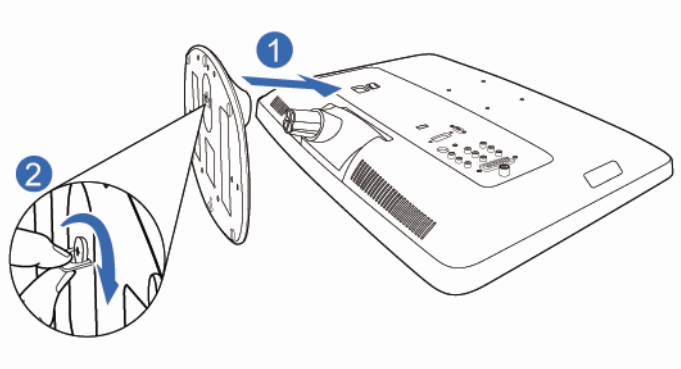
1. Power on or stand-by
2. Set sleep timer
3. Select input signal source
4. Number keys for direct channel access
5. Back to the last channel
6. Display the programme list
7. Previous and next programme; also Teletext page up and down
8. List favourite programmes
9. Volume up, volume down, and mute
10. Menu, exit, ◀, ▲, ▶, ▼ and enter
11. Splendid mode selection; also red button
12. Change sound mode; also green button
13. Adjust brightness; also yellow button
14. Auto adjust screen for VGA; also blue button
15. Display Teletext
16. Picture freeze; also Teletext hold
17. Wide or square picture format; also Teletext size
18. Electronic Program Guide; also Teletext reveal
19. Broadcast information; also Teletext index
20. Display or hide the time; also Teletext sub-page
21. Stereo sound mode; also Teletext cancel
22. Display digital subtitle

2.1 Assembling the Display

To assemble the monitor base:

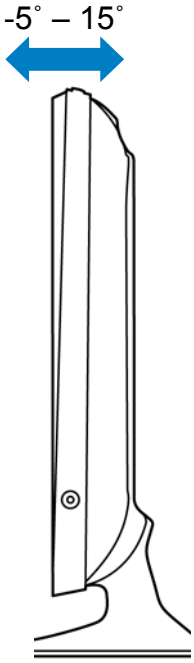
1. Have the front of the display face down on a table.
2. Align the base on the arm to fit it into the arm groove.
3. Fix the base to the arm by fastening the bundled screw.

We recommend that you cover the table surface with soft cloth to prevent damage to the display.



2.2 Adjusting the Posture of the Display

- For optimal viewing, we recommend that you look at the full face of the display, and then adjust the display to the angle that is most comfortable for you.
- Hold the stand to prevent the monitor from falling when you change its angle.
- You can adjust the display's angle from -5˚ – 15˚.



It is normal that the monitor slightly shakes while you adjust the viewing angle.

2.3 Detaching the arm / base (only for 27T1EH) (For VESA wall mount)

The detachable arm/base of this LED monitor is specially designed for VESA wall mount.

To detach the arm/base:

1. Have the front of monitor face down on a table.
2. Remove the rubbers in the four screw holes (figure 1).
3. Remove the base (figure 2).
4. Pry the rear hinge cover (figure 3).
5. Use a screwdriver to remove the four screws on the hinge (figure 4), then remove the hinge.

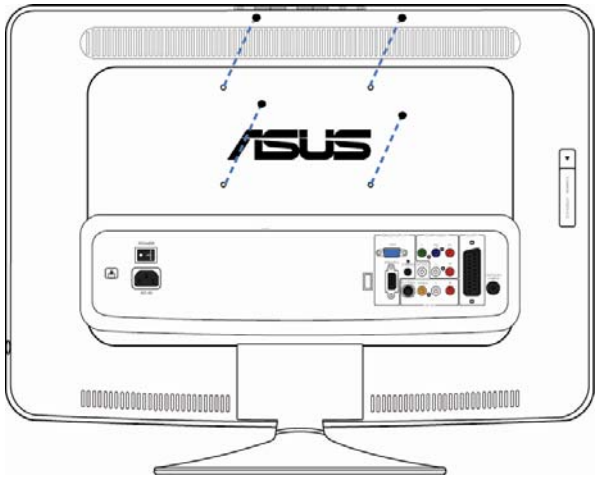


Figure 1

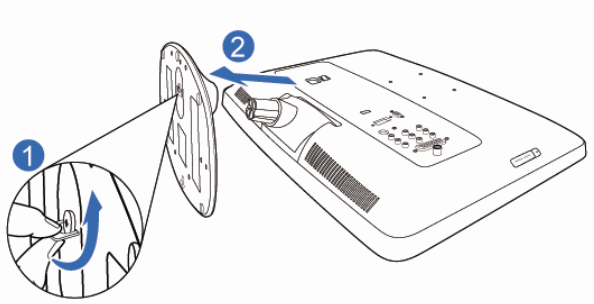


Figure 2

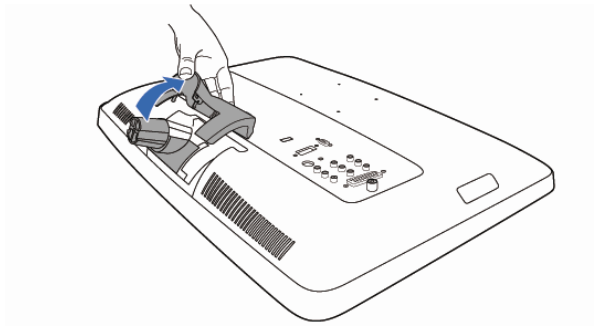


Figure 3

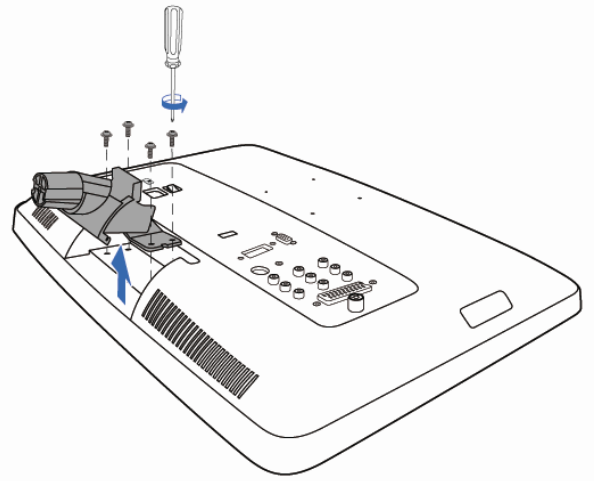
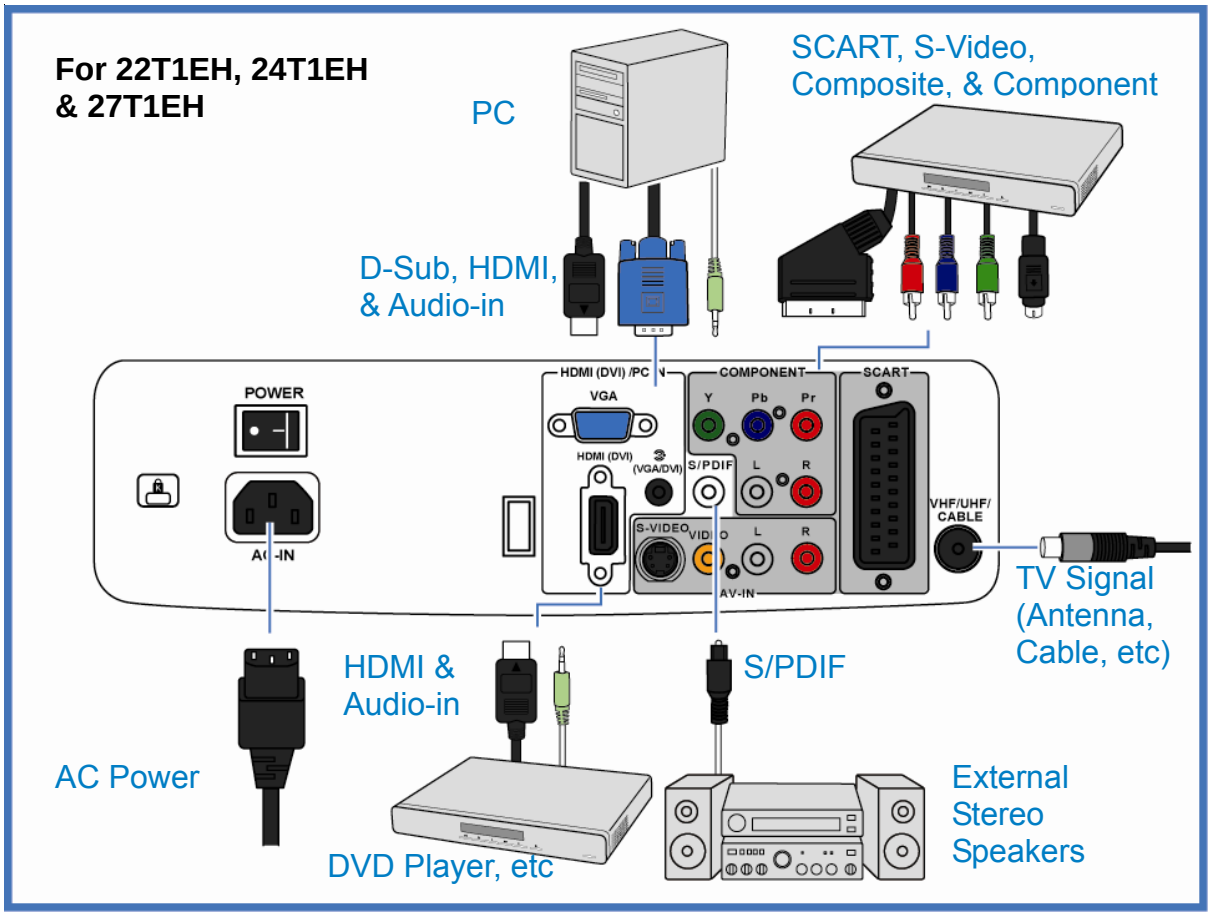


Figure 4

We recommend that you cover the table surface with soft cloth to prevent damage to the monitor.

2.4 Connecting the Display



- **To connect the power cord:** connect one end of the power cord securely to the display's AC input port, the other end to a power outlet.

Before you connect the cables, ensure that the connected devices are switched off or the power cord is unplugged from the electricity supply.

- **To connect the signal cables:** connect one end of the signal cable(s) to the display, the other end to your computer or any other video devices.

When more than one signal sources are simultaneously connected, you can switch the input source by using the key on the keypad of the display or on the remote controller.

- **To connect the audio cable:** connect the audio cable from the display's audio-in port to the computer's and/or video devices' audio-out port.
- **To connect to external speakers:** Connect an audio-out cable from the audio-out port of the display to the audio-in port of external speakers.

2.5 Turning the Display On

Press the power button. See section 1.3 Display Introduction for the location of the power button. The power indicator lights up in blue to show that the monitor is ON.

2.6 Setting the Monitor

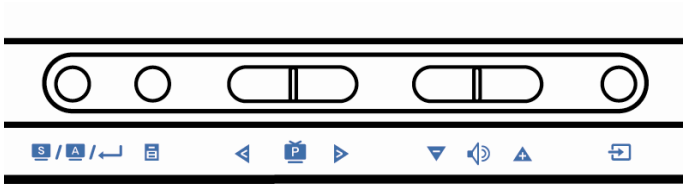
Set the PC signal to the optimal resolution and frequency for the best picture quality.

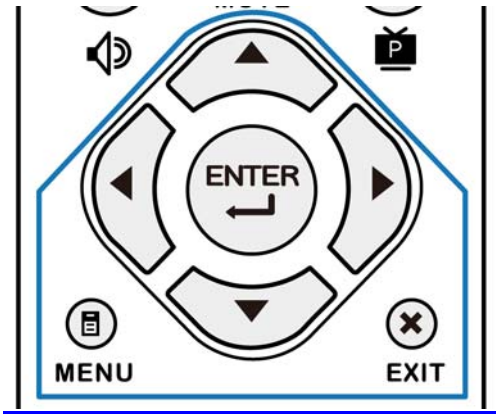
Resolution	Vertical frequency	Horizontal frequency	Pixel frequency
720 x 400	70Hz	31.47KHz	28.32MHz
640 x 480	60Hz	31.47KHz	25.17MHz
640 x 480	72Hz	37.86KHz	31.50MHz
640 x 480	75Hz	37.50KHz	31.50MHz
800 x 600	56Hz	35.16KHz	36.00MHz
800 x 600	60Hz	37.88KHz	40.00MHz
800 x 600	72Hz	48.08KHz	50.00MHz
800 x 600	75Hz	46.88KHz	49.50MHz
848 x 480	60Hz	31.02KHz	33.75MHz
1024 x 768	60Hz	48.36KHz	65.00MHz
1024 x 768	70Hz	56.48KHz	75.00MHz
1024 x 768	75Hz	60.02KHz	78.75MHz
1152 x 864	75Hz	67.50KHz	108.00MHz
1280 x 720	60Hz	44.77KHz	74.51MHz
1280 x 768	60Hz	47.78KHz	79.50MHz
1280 x 768	75Hz	60.29KHz	102.25MHz
1280 x 800	60Hz	49.70KHz	83.50MHz
1280 x 960	60Hz	60.00KHz	108.00MHz
1280 x 1024	60Hz	63.98KHz	108.00MHz
1280 x 1024	75Hz	79.98KHz	134.99MHz
1360 x 768	60Hz	47.71KHz	85.49MHz
1366 x 768	60Hz	47.10KHz	72.43MHz
1400 x 900	60Hz	55.93KHz	106.49MHz
1400 x 1050	60Hz	65.32KHz	121.75MHz
1600 x 1024	60Hz	62.1KHz	112.26MHz
1680 x 1050	60Hz	65.29KHz	146.24MHz
1920 x 1080	60Hz	67.50kHz	148.50MHz

- Modes not listed in the table may possibly not be supported.
- Press A button for 2 – 3 seconds if noise, trembling, or picture offset appears on the screen while VGA input is in use.
- The 1080 24p resolution is only available for HDMI input.

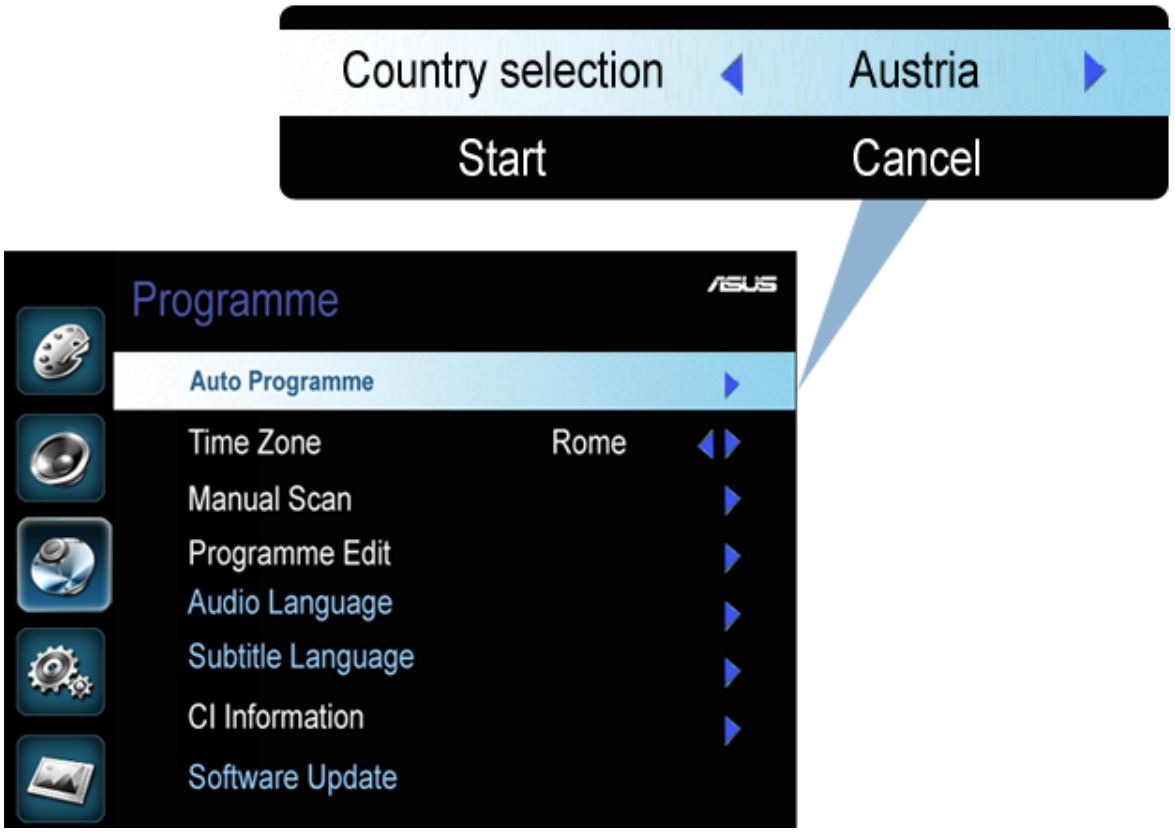
2.7 Setting the Television

1. Press MENU button either on the keypad of the display or on the remote controller and use◀, ▲, ▶, ▼, and ⮐ buttons to select “Programme”.





2. Select “Auto Programme” and choose the country of the broadcasting system.
3. Select “Start” to scan all the available channels and store them in the memory.

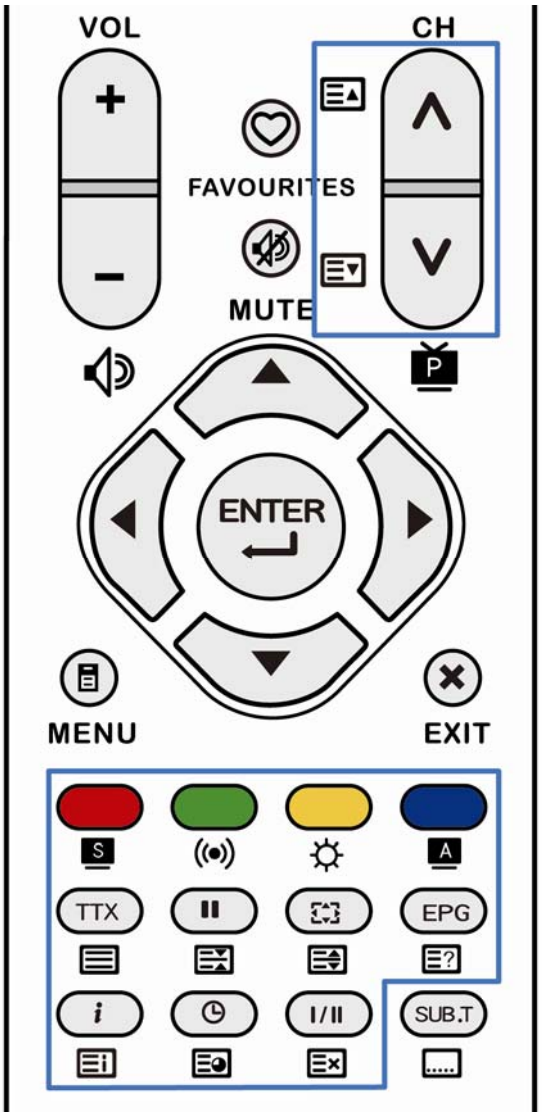


- For further information of setting the TV, please read chapter 3.1.2.

2.8 Using Teletext

You can control the Teletext functions only by the remote controller. The keypad on the display does not provide such functions.

Press TTX button to display Teletext. Press it again or ✖ EXIT button to switch off Teletext.



1. **SIMPLE Text**
   - Enter the three-digit page number with the number buttons to display your desired page.
   - Press or to display the preceding or the following page.
2. **TOP Text**
   - Press the blue button to select the desired block
   - Press the yellow button to select the next group.
   - Press the green button to display the next page. The button can also do the same.
   - Press the red button to display the preceding page. The button can also do the same.
   - Like SIMPLE Text, you can enter the three-digit page number with the number buttons to display your desired page.
3. **Teletext functions**
   - **Teletext Hold** to hold and to continue the automatic page change when the Teletext page has more than one sub-page.
   - **Teletext Size** to double the text size of the upper or the lower half of the page, and to switch back to ordinary text size.
   - **Teletext Reveal** to reveal and to hide the concealed information, such as answer of riddles.
   - **Teletext Sub-Page** to select a sub-page in Teletext and to exit from this function.
   - **Teletext Cancel** to display the broadcast while searching for a certain Teletext page.

2.9 Electronic Programme Guide (EPG)

This EPG information is transmitted by the broadcaster and may not be available in some countries or regions.

You can control EPG functions only by the remote controller. The keypad on the display does not provide such functions.

Press EPG button to display Electronic Programme Guide. The programme information along the time axis will be displayed. You can scroll the time axis forward and backward to see more information. Press EPG button again or ✖ EXIT button to switch off EPG.

Use ▲, ▶, ▼, ◀, and ENTER↵ to select and display the desired programme if it is playing. Press to display the information of the selected programme.

EPG can remind you when your desired programme is to play. Press the blue button to enter the reminder function. There you can specify the programme and the time that should be reminded to you. You can also decide whether the programme should be reminded only once or periodically.

Press the green button to display the schedule list. It can tell you the schedule of the programmes set to remind you.

2.10 Programme List

1. Programme List

The programme list will be displayed by pressing button on the remote controller. You can control the programme list only by the remote controller. The keypad on the display does not provide such functions.
You can use the ▲ ▼ buttons to move the highlighted item. Press ENTER↵ to enter the highlighted programme. You can see a icon for a locked programme and a icon for a favourite programme. The following icons indicate the type of a programme.

DTV	Digital television programme
TV	Analogue television programme
	Radio channel

2. Favourite Programme List

The favourite programme list will be displayed by pressing button on the remote controller. You can control the favourite programme list only by the remote controller. The keypad on the display does not provide such functions. Please read chapter 3.1.2 Programme Edit for specifying your favourite programmes.

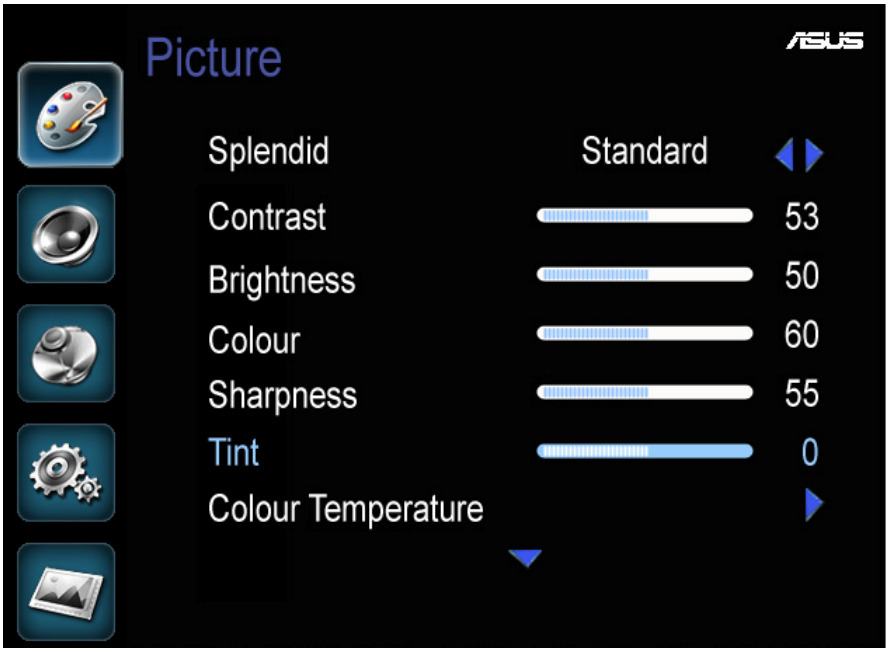
3.1 On-Screen Display (OSD) Menu

3.1.1 How to reconfigure

1. Press MENU button either on the keypad of the display or on the remote controller to activate the OSD menu.
2. Use ◀, ▶, ▲, and ▼ to navigate through the functions. The chosen function will be highlighted. To activate the chosen function, press ENTER↵ button. If the selected function has a sub-menu, still use ◀, ▶, ▲, and ▼ to navigate through the sub-menu functions. Again, the chosen function will be highlighted and you can activate it by pressing ENTER↵ button.
3. Use ◀, ▶, ▲, or ▼ to change the settings of the activated function.
4. You can go back to the top level of the OSD menu list whenever you press the MENU button. Repeat step 2 and 3 to adjust any other function.
5. To exit from the OSD menu, press the key on the keypad of the display or ✖ EXIT button on the remote controller.

3.1.2 OSD menu introduction

1. Picture



- **Splendid:** to switch among Standard, Theatre, Game, and Scenery video modes of Splendid™ Video Enhancement Technology.
  - **Standard:** best choice for document editing with Splendid™ Video Intelligence Technology.
    In this mode, you can adjust Sharpness, Colour, and Tint to define your preferred picture effect.
  - **Theatre:** best choice for watching films with Splendid™ Video Intelligence Technology.

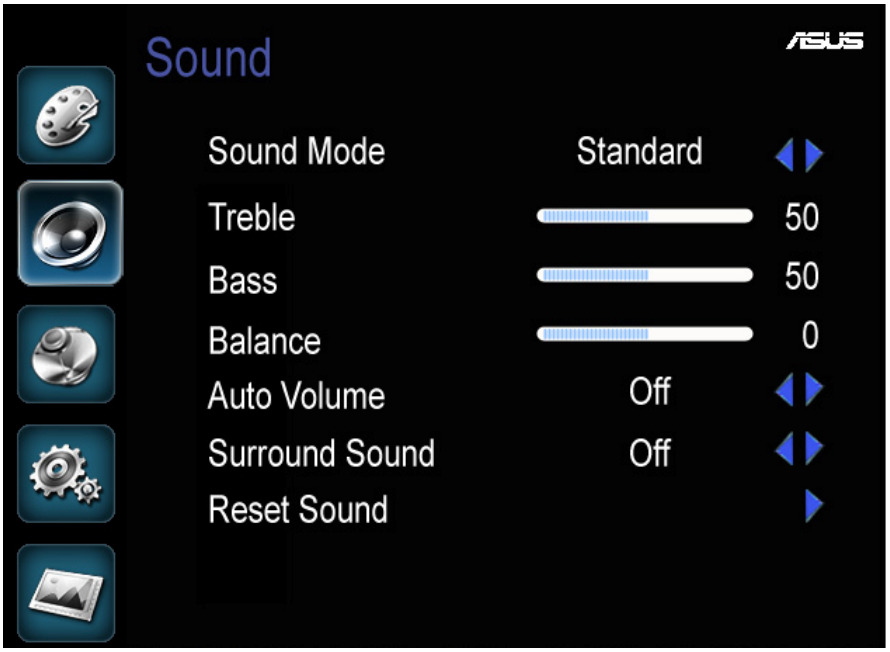
- **Game:** best choice for game playing with Splendid™ Video Intelligence Technology.
- **Scenery:** best choice for scenery photo display with Splendid™ Video Intelligence Technology.

- **Contrast:** to adjust the contrast of the displayed picture.
- **Brightness:** to adjust the luminance of the display.
- **Colour:** to adjust the colour of the displayed picture deeper or paler; this function is active only in Standard Splendid™ mode and when VGA input is not in use.
- **Sharpness:** to adjust the sharpness of the displayed picture; this function is active only in Standard Splendid™ mode.
- **Tint:** to make the displayed picture more red or green; this function is active only when input is NTSC by Video port.

You can NOT adjust Colour, Sharpness or Tint for VGA input.

- **Colour Temperature:** to select the colour temperature among warm, mild, cool, and user's modes. In user's mode, you can adjust the level of the red, green, and blue to define your preferred white colour.
- **VGA:** to adjust the image parameters for VGA input.
  - **Auto Adjust:** to let the display automatically optimize the VGA input image.
  - **Horizontal Pos.:** to adjust the horizontal position of the VGA input image.
  - **Vertical Pos:** to adjust the vertical position of the VGA input image.
  - **Clock:** to adjust the frequency of the VGA input image.
  - **Phase:** to adjust the phase of the VGA input image.
- **Noise Reduction:** to specify the intense of noise reduction function among Off, Low, Moderate, High and Auto.
- **ASCR:** to switch on and off the ASUS Smart Contrast Ratio function.
- **Back Light Control:** to adjust the back light intensity.
- **Reset Picture:** to reset all the picture parameters.

2. Sound



- **Sound Mode:** to switch among Vocal, Rock, Soft, Boom, and Standard sound modes.
  - **Vocal:** to emphasize the human voice for news report or speech.
  - **Rock:** to emphasize bass and treble for rock music.
  - **Soft:** to slightly increase bass and treble for soft music.
  - **Boom:** to emphasize low tone for fighting games.
  - **Standard**: to adjust the equalizer to define your preferred sound effect.
- **Treble:** to adjust the sound treble of the speakers to your preferred levels.
- **Bass:** to adjust the sound bass of the speakers to your preferred levels.
- **Balance:** to adjust the sound balance of the speakers to your preferred levels.
- **Auto Volume:** to automatically keep the volume level equal even if changing programmes.
- **Surround Sound:** to turn the simulated surround sound system on and off.
- **Reset Sound:** to reset all the sound parameters.

3. **Programme** - This function is to set the TV channels and programmes.

- **Auto Programme:** choose the country of the broadcasting system and then select “Start” to scan all the available channels and store them in the memory.
- **Time Zone:** to specify your time zone.
- **Manual Scan:** to manually set the programme list.
  - **DTV Manual Tuning:** to manually set the programme list of digital broadcasts. You need to specify the channel number of UHF or VHF band and then let the system search the signal.
  - **ATV Manual Tuning:** to manually set the programme list of analogue broadcasts. You need to specify the broadcasting system and the channel number then let the system search it. You are provided with the option of fine tuning the signal.

BG: PAL B/G or SECAM B/G (usually in Europe, Asia, Middle East, Australia, and Africa)
DK: PAL D/K or SECAM D/K (usually in East Europe, China, Africa, and CIS countries)
I: PAL I/II (usually in UK, Ireland, Hong Kong, and South Africa)
L: SECAM L/L’ (usually in France)

- **Programme Edit:** to edit the programme list.

  You can use the ▲ ▼ buttons to move the highlighted item.

  For DTV:
  You can press the blue button to skip the channel. The function will be deactivated by pressing the same button again. The red button is to delete the channel from the programme list. The display will ask for your confirmation for selecting this function.

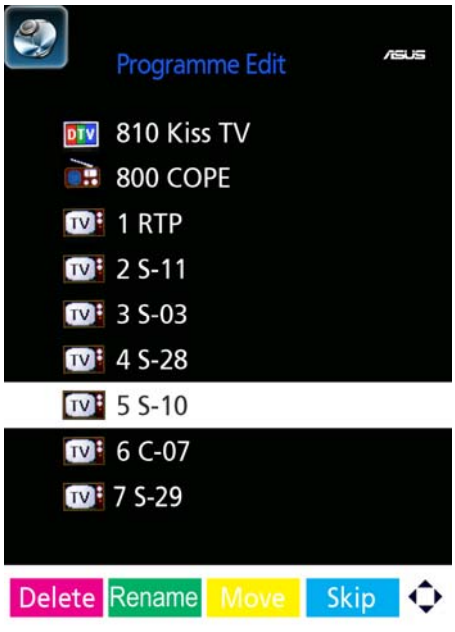
  For ATV:
  You can press the blue button to skip the channel. The function will be deactivated by pressing the same button again. The red button is to delete the channel from the programme list. The display will ask for your confirmation for selecting this function. The green button is to rename a channel. The yellow button is to rearrange the order of channels.

  Rename a channel:
  You can rename an ATV channel using the programme edit function.

  1. Press ▲ and ▼ to highlight the channel you want to rename.
  2. Select RENAME by pressing ⬭ on the remote control.
  3. Press ▲ and ▼ to select a character, and press ▶ to add another character.
  4. Press ⬭ to confirm the channel name.

  Channel moving:
  You can move the ATV channel using the programme edit function.

  1. Use ▲ and ▼ to highlight the channel you want to move.
  2. Select MOVE by pressing the yellow key ⬭ on the remote control.



  3. You can use ▲ and ▼ to move it to your desired position.
  4. Press the ⬭ button to confirm the channel position.

- **Audio Language:** to select your preferred language for audio. You can also select audio language with the I / II button on the remote controller when more than one audio language is broadcasted.

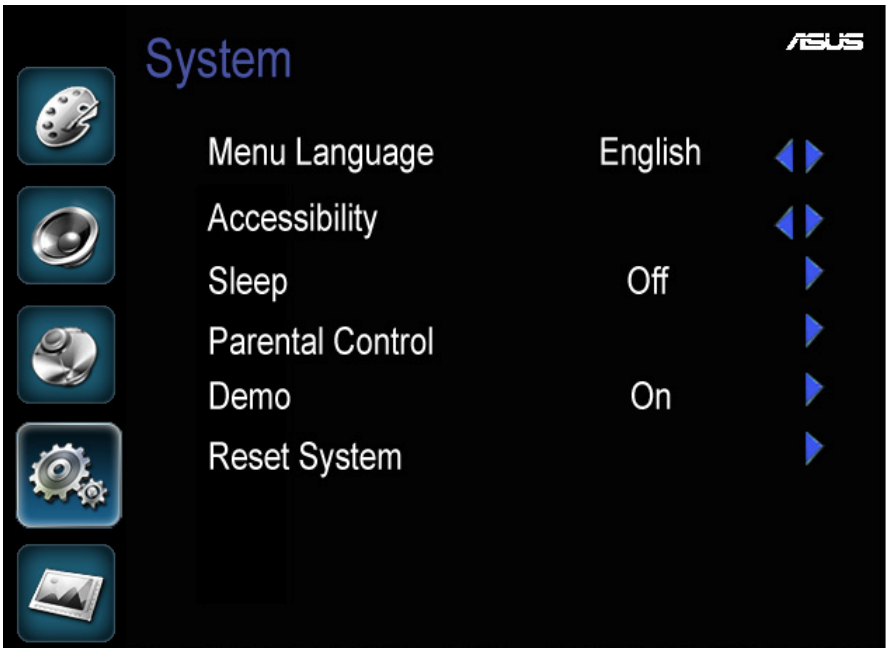
- **Subtitle Language:** to select your preferred language when more than one subtitle language is broadcasted. You can also select subtitle language with the SUB.T button on the remote controller.

- **CI Information:** to display the information of your CAM, Conditional Access Module, in the CI card slot.

CAM is not an accessory of this product. It is generally provided by your Pay-TV services provider.

- **Software Update:** to upgrade the system.

4. System



- **Menu Language:** to select the language of the display messages among English, French, German, Spanish, Italian, Portuguese, Dutch, Swedish, Danish, Greek, Norwegian, Finnish, Polish, Hungarian, Slovene, Czech, Russian, Romanian, Bulgarian, Serbian, Croatian, Estonian, Turkish, Slovak, and Latvian.
- **Accessibility:** to turn on the hearing impaired subtitle and visual impaired audio if they are transmitted by the broadcaster.
  - **Subtitle Type:** to turn on the normal or hearing impaired subtitle if it is transmitted by the broadcaster.
  - **Audio Type:** to turn on the normal or visual impaired audio if it is transmitted by the broadcaster.
  - **Visual Impaired:** to adjust the volume of visual impaired audio.

You will see the icon if the broadcast has the assistance function for visual and hearing impaired people.

You will see the icon if the broadcast has the assistance function for visual and hearing impaired people.

This function is only available for digital broadcasts.

- **Sleep:** to set a countdown of 15, 30, 45, 60, 90, 120 minutes till the display automatically switches off. Select Off to turn off this function.
- **Parental Control:** to prohibit unauthorized users, such as children, from watching specific programmes. Password is required to access this function.

  When you enable this function, you can block programmes that are listed in the programme list. Once a programme is locked, you can see a icon on the Lock Programme list and also on the general Programme List.

  "0000" is the password to enter parental control.
  The password "7788" will ALWAYS be accepted in case you forget your password.
- **Demo:** to turn on the demo mode for shop-front display.
- **Reset System:** to restore all the settings back to the factory default.

5. Display

- **Aspect Ratio:** to change the aspect ratio of the displaying image among Wide, Square, Auto, Panorama, Zoom1, and Zoom2.
  - **Wide:** to fit pictures to 16:9 wide full screen
  - **Square:** to leave the left and right sides of the screen blank to display 4:3 format pictures

- **Auto:** to automatically select the screen aspect ratio according to the broadcasting signal
- **Panorama:** to fit the 4:3 signal into the 16:9 wide screen by keeping the centre of the picture in the same aspect ratio and stretching the both sides more
- **Zoom1:** to stretch the centre of 2.35:1 pictures to the top and bottom of the screen and leave the left and right sides of the picture outside the screen being un-displayed
- **Zoom2:** to stretch the centre of 1.85:1 pictures to the top and bottom of the screen and leave the left and right sides of the picture outside the screen being un-displayed

▪ **HDMI Scan Info:** to select the HDMI scanning method among Auto, Over scan, and Under scan.

This function is only available for HDMI input.

▪ **SCART Input:** to select the combined video source between Video + RGB and S-Video + RGB.

This function is only available for SCART input.

▪ **Reset Display:** to reset all the display parameters.

3.2 Specifications Summary

1. 22T1EH

Panel Type	White Light Emitting Diode Display (WLED)
Panel Size	21.5” (54.87cm, 16:9) wide screen
Viewing Area	478.2mm (H) x 269.7mm (V)
Max Resolution	1920 x 1080
Pixel Pitch	0.248mm (H) x 0.248mm (V)
Luminance	250 cd/m^2
Contrast Ratio	10,000,000:1 (when ASCR on)
Viewing Angle (H/V)	170° / 160° (CR>10)
Display Colours	16.7 million colours
Colour Gamut	68% NTSC
Synchronization Frequency	Horizontal 30 – 82 kHz Vertical 50 – 76 Hz
Max. Pixel Frequency	162 MHz
Signal Connectors	19-pin HDMI, 15-pin D-Sub, RCA R+L audio-in, 3.5mm mini-jack audio-in, 3.5mm mini jack headphone-out, SCART, Component, Composite, S-Video, S/PDIF audio-out, IEC 169-2 RF connector
TV System	Analogue PAL B/G/D/K/I, SECAM L/D/K/L Digital DVB-T MPEG-4
Colour System	PAL, SECAM NTSC 3.58, 4.43 (video-in only)
Channel Coverage	Analogue 48.25 – 855.25 MHz Digital VHF Band III (177.5 – 226.5 MHz) UHF E21 – E69 (474 – 858 MHz)
Speakers	7W x 2 (stereo)
Power LED	Blue (On) / Red (Standby)
Tilt	-5°~15°
Power Requirement	AC 100 – 240V, 50 / 60 Hz
Power Consumption	Maximum: < 60 W, Stand-by: < 0.5 W, Power off: < 0.3 W
Environmental Conditions	Operating temperature between 0°C and 40°C Storage temperature between -20°C and 60°C Operating/Storage humidity between 10% and 70%
Dimensions (W x H x D)	540.6 mm x 438.5 mm x 191.2 mm (machine) 594 mm x 543 mm x 147 mm (package)
Weight	7.6 kg (gross), 5.9 kg (net)
VESA Wall-Mount	Not applicable
Accessories	VGA cable, Audio cable, Power cord, Warranty card, QSG, CD
Regulation Approvals	Energy Star®, EuP, CB, CE, , Gost-R, RoHS, WEEE, Windows Vista WHQL

* Specifications are subject to change without prior notice.

2. 24T1EH

Panel Type	White Light Emitting Diode Display (WLED)
Panel Size	23.6” (60cm, 16:9) wide screen
Viewing Area	523mm (H) x 295mm (V)
Max Resolution	1920 x 1080
Pixel Pitch	0.275mm (H) x 0.275mm (V)
Luminance	300 cd/m^2
Contrast Ratio	10,000,000:1 (when ASCR on)
Viewing Angle (H/V)	170° / 160° (CR>10)
Display Colours	16.7 million colours
Colour Gamut	70% NTSC
Synchronization Frequency	Horizontal 30 – 82 kHz Vertical 50 – 76 Hz
Max. Pixel Frequency	162 MHz
Signal Connectors	19-pin HDMI, 15-pin D-Sub, RCA R+L audio-in, 3.5mm mini-jack audio-in, 3.5mm mini jack headphone-out, SCART, Component, Composite, S-Video, S/PDIF audio-out, IEC 169-2 RF connector
TV System	Analogue PAL B/G/D/K/I, SECAM L/D/K/L Digital DVB-T MPEG-4
Colour System	PAL, SECAM NTSC 3.58, 4.43 (video-in only)
Channel Coverage	Analogue 48.25 – 855.25 MHz Digital VHF Band III (177.5 – 226.5 MHz) UHF E21 – E69 (474 – 858 MHz)
Speakers	7W x 2 (stereo)
Power LED	Blue (On) / Red (Standby)
Tilt	-5°~15°
Power Requirement	AC 100 – 240V, 50 / 60 Hz
Power Consumption	Maximum: < 60 W, Stand-by: < 0.5 W, Power off: < 0.3 W
Environmental Conditions	Operating temperature between 0°C and 40°C Storage temperature between -20°C and 60°C Operating/Storage humidity between 10% and 70%
Dimensions (W x H x D)	589.6 mm x 465.2 mm x 191.2 mm (machine) 653 mm x 578 mm x 147 mm (package)
Weight	8.1 kg (gross), 6.6 kg (net)
VESA Wall-Mount	Not applicable
Accessories	VGA cable, Audio cable, Power cord, Warranty card, QSG, CD
Regulation Approvals	Energy Star®, EuP, CB, CE, , Gost-R, RoHS, WEEE, Windows Vista WHQL

* Specifications are subject to change without prior notice.

3. 27T1EH

Panel Type	White Light Emitting Diode Display (WLED)
Panel Size	27” (68.9cm, 16:9) wide screen
Viewing Area	600.1mm (H) x 338.7mm (V)
Max Resolution	1920 x 1080
Pixel Pitch	0.3114mm (H) x 0.3114mm (V)
Luminance	300 cd/m^2
Contrast Ratio	10,000,000:1 (when ASCR on)
Viewing Angle (H/V)	170° / 160° (CR>10)
Display Colours	16.7 million colours
Colour Gamut	70% NTSC
Synchronization Frequency	Horizontal 30 – 82 kHz Vertical 50 – 76 Hz
Max. Pixel Frequency	162 MHz
Signal Connectors	19-pin HDMI, 15-pin D-Sub, RCA R+L audio-in, 3.5mm mini-jack audio-in, 3.5mm mini jack headphone-out, SCART, Component, Composite, S-Video, S/PDIF audio-out, IEC 169-2 RF connector
TV System	Analogue PAL B/G/D/K/I, SECAM L/D/K/L Digital DVB-T MPEG-4
Colour System	PAL, SECAM NTSC 3.58, 4.43 (video-in only)
Channel Coverage	Analogue 48.25 – 855.25 MHz Digital VHF Band III (177.5 – 226.5 MHz) UHF E21 – E69 (474 – 858 MHz)
Speakers	7W x 2 (stereo)
Power LED	Blue (On) / Red (Standby)
Tilt	-5°~15°
Power Requirement	AC 100 – 240V, 50 / 60 Hz
Power Consumption	Maximum: < 70 W, Stand-by: < 0.5 W, Power off: < 0.3 W
Environmental Conditions	Operating temperature between 0°C and 40°C Storage temperature between -20°C and 60°C Operating/Storage humidity between 10% and 70%
Dimensions (W x H x D)	666.5 mm x 515.2 mm x 229.9 mm (machine) 666.5 mm x 465.8 mm x 85.78 mm (w/o stand) 755 mm x 685 mm x 148 mm (package)
Weight	12.7 kg (gross), 8.9 kg (net)
VESA Wall-Mount	Yes (100 mm x 100 mm)
Accessories	VGA cable, Audio cable, Power cord, Warranty card, QSG, CD
Regulation Approvals	Energy Star®, EuP, CB, CE, , Gost-R, RoHS, WEEE, Windows Vista WHQL

* Specifications are subject to change without prior notice.

3.3 Troubleshooting (FAQ)

Phenomenon	Recommended Actions
Power indicator off	▪ Press the power button again and check whether the power is on. ▪ Check whether the power switch on the back side of the display is on. ▪ Check whether the power cord is well connected.
Red power indicator and blank screen	▪ Check whether both the display and the selected video device, or the computer, are on. ▪ Check whether the signal cable is well connected. ▪ Check whether the signal cable is undamaged. ▪ When computer is in use, check whether the computer is waken by clicking any key on the keyboard or moving the mouse. ▪ Check whether the video device, or the computer, is working well by connecting it to another display, if available.
Remote controller malfunctions	▪ Ensure no obstruction between the display and the remote controller. ▪ Check whether the batteries are installed correctly to the correspondent polarities. ▪ Install new batteries.
Screen too bright, too dark, or colour error	▪ Check whether the signal cable is undamaged. ▪ Use “Reset” function in the Picture item of the OSD menu.
Screen image bouncing, rolling, or with water-flowing pattern	▪ Check whether the signal cable is well connected. ▪ Move away electrical devices that may cause electromagnetic interference.
Screen image blurry or fuzzy	▪ Check whether the video signal cable is well connected. ▪ Use “Auto Adjust” function for VGA input.
No sound or low sound level	▪ Check whether the audio cable is well connected. For some video devices and computers, the audio signal is NOT transmitted over the HDMI interface. Audio cable MUST be connected in this case. ▪ Adjust the volume level. ▪ For PC sound, check whether the sound card and its driver are properly installed and activated.
TV screen double image, snowing, or ghosting	▪ Check whether the TV signal cable is well connected. ▪ Check the antenna is undamaged. ▪ Check the location and direction of the antenna. ▪ Ensure the antenna not too old.
PC screen image not centred or sized properly	▪ Use “Auto Adjust” function.